

ABSTRACT OF THE DISCLOSURE

A transport layer protocol such as the Stream Control Transmission

Protocol uses a new traffic control technique instead of the TCP slow start algorithm.

The procedure assumes that the network on which it is implemented has a fixed bandwidth assigned for the connection, and that the allotted bandwidth roughly matches the traffic load. Based on this, under message loss conditions it is only necessary to ensure that signaling traffic emitted into the network by the sender is no greater than the fixed bandwidth that has been allocated to the connection. That is, retransmissions take bandwidth away from a fixed allocation that has been made for the connection, but do not cause the connection itself to reduce the overall traffic it generates into the network; rather, it maintains the same traffic level. This technique prevents congestion in the network from increasing when message loss occurs; at the same time it does not reduce bandwidth for the association as rapidly as the slow start procedure.